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DATE MAILED: 06/26/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,224	10/05/2001	Noriyuki Isobe	9369-67US (U01-138131C/KK	4395
570	7590 06/26/2003			•
AKIN GUMP STRAUSS HAUER & FELD L.L.P.			EXAMINER	
ONE COMMERCE SQUARE 2005 MARKET STREET, SUITE 2200 PHILADELPHIA, PA 19103-7013		BISSETT, MELANIE D		
			ART UNIT	PAPER NUMBER
			1711	

Please find below and/or attached an Office communication concerning this application or proceeding.

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Application N .	Applicant(s)						
09/972,224	ISOBE ET AL.						
Examiner	Art Unit						
Melanie D. Bissett	1711						
The MAILING DATE f this communication appears n the cover sheet with the corresp ndence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status							
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is action is non-final.							
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
vn from consideration.							
5)⊠ Claim(s) <u>11-13 and 18-20</u> is/are allowed.							
6)⊠ Claim(s) <u>1-4,6-8,10,14 and 15</u> is/are rejected.							
7)⊠ Claim(s) <u>5,9,16 and 17</u> is/are objected to.							
r election requirement.							
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
s have been received.							
2. Certified copies of the priority documents have been received in Application No							
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
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visional application has been rec	eived.						
- p 2							
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	Examiner  Melanie D. Bissett  ears n the cover sheet with the cover shee	ISOBE ET AL.					

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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kinzelmann et al.
- 3. Kinzelmann discloses moisture-curing polyamides for connecting and joint pieces (col. 6 lines 12-29), where copolyamides are used (col. 2 line 58-67; col. 3 line 37-62). The reference does not specify the use of the joint pieces with solvent adhesive to be attached to nylon resin moldings. However, it is the examiner's position that such a limitation is presented in the claim as an intended use. Thus, any copolymerized nylon joint capable of being adhered to a nylon molding with a solvent adhesive would anticipate the claim. It is the examiner's position that the materials of Kinzelmann's invention are inherently capable of adhesion to nylon molding.
- 4. Claims 1-4 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Umetsu et al.
- Umetsu discloses polyamide resin compositions for producing moldings
   comprising a polyamide resin, a liquid crystalline resin, and an acid anhydride
   (abstract). Copolyamides including those resulting from two or more of the applicant's



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claimed units are used in the invention (col. 3 lines 25-59), and applications for the moldings include use as connectors, pipes, and water joints (col. 12). The use of lubricants (col. 11 lines 13-33) and nucleating agents (col. 9 line 50-col. 10 line 14) are suggested. Also, since Umetsu teaches the combination of a copolymerized nylon with another resin, the reference teaches a copolymerized nylon blend. Regarding claim 8, Reference Example A-3 suggests a copolyamide comprising 50 mol% of dodecamide units, resulting in about 50 wt% of dodecamide units.

- 6. The reference does not specify the use of the joint pieces with solvent adhesive to be attached to nylon resin moldings. However, it is the examiner's position that such a limitation is presented in the claim as an intended use. Thus, any copolymerized nylon joint capable of being adhered to a nylon molding with a solvent adhesive would anticipate the claim. It is the examiner's position that the materials of Umetsu's invention are inherently capable of adhesion to nylon molding.
- 7. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.
- 8. Claims 1, 4, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishimura et al.
- 9. Nishimura discloses fiber reinforced plastics comprising a fabric material and a bonding material (abstract). Bonding materials preferably include copolymerized nylons, including those having two or more of the applicant's claimed units (col. 3 line

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61-col. 4 line 5). Articles formed from the invention include T-type joints (col. 20 lines 55-59), where the fabric substrates are bonded using a bonding material and are molded with another resin material to form an article (col. 21 lines 7-18). Because of the layer structure used and the impregnant, the resulting article is a dissimilar material molded structure.

- 10. The reference does not specify the use of the joint pieces with solvent adhesive to be attached to nylon resin moldings. However, it is the examiner's position that such a limitation is presented in the claim as an intended use. Thus, any copolymerized nylon joint capable of being adhered to a nylon molding with a solvent adhesive would anticipate the claim. It is the examiner's position that the materials of Nishimura's invention are inherently capable of adhesion to nylon molding.
- 11. Claims 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Tokyo Shibaura Electric Company Limited.
- 12. Tokyo Shibaura discloses liquid adhesives comprising a polyamide copolymer and an organic solvent (p. 1 lines 41-48), including those having two or more of the applicant's claimed units (p. 2 lines 15-25). An adhesive solution comprises 15 parts of copolymer to 85 parts solvent (example 1). Example 5 shows a combination of one part solution A to two parts solution B, resulting in ~5% by weight of polyamide copolymer per adhesive solution. The reference does not specify the use of the adhesives for nylon resin moldings. However, it is the examiner's position that such a limitation is presented in the claim as an intended use. Thus, any copolymerized nylon solution

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adhesive capable of adhering to a nylon molding would anticipate the claim. It is the examiner's position that the materials of Tokyo Shibaura's invention are inherently capable of adhering to nylon molding.

## Claim Rejections - 35 USC § 103

- 13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 14. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Umetsu et al.
- 15. Umetsu applies as above, failing to exemplify nylon compositions comprising talc or metal soaps in the applicant's claimed amount. However, the reference does suggest the use of talc as a filler (col. 9 lines 50-67) and suggests the use of cupric stearate as a copper compound for improving heat resistance (col. 10 lines 25-36). The fillers are used in amounts up to 300 parts by weight (col. 10 lines 19-24), and the copper compounds are used in amounts of 0.01-2 parts by weight (col. 10 lines 38-41). Since the fillers are used to improve mechanical strength of the composition, it is the examiner's position that it would have been prima facie obvious to use the filler in any amount necessary to achieve a desired mechanical strength. Also, it would have been prima facie obvious to choose talc from the listed fillers in the expectancy of forming a composition with equally improved mechanical strength. Since the copper compounds

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are shown to yield improved heat resistance, it is the examiner's position that it would have been prima facie obvious to choose a metal soap from the listed compounds in the expectancy of forming a composition having equally improved heat resistance.

#### Allowable Subject Matter

- 16. Claims 11-13 and 18-20 are allowed.
- 17. Claims 5, 9, and 16-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 18. The following is a statement of reasons for the indication of allowable subject matter:
- 19. The closest prior art, Umetsu et al., discloses polyamide resin compositions for producing moldings comprising a polyamide resin, a liquid crystalline resin, and an acid anhydride. Copolyamides including those resulting from two or more of the applicant's claimed units are used in the invention, and applications for the moldings include use as connectors, pipes, and water joints. However, the reference does not indicate the use of nylon copolymer/nylon blends, the claimed solvents, or the adhesion of copolymer nylon materials to nylon materials using a solvent adhesive. Therefore, it is the examiner's position that the combinations of limitations for the abovementioned claims render the claims novel and unobvious over the prior art.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie D. Bissett whose telephone number is (703) 308-6539. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (703) 308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

mdb June 24, 2003

James J. Seidleck Supervisory Patent Examiner Technology Center 1700 Page 7